

The originally-filed specification, claims, abstract, and drawings fully support the amendments to the title, the specification, and claims 14-16, as well as the addition of new claims 25-92. No new matter was introduced.

Before entry of this Amendment, claims 1-24 were pending in this application. After entry of this Amendment, claims 14-16 and 25-92 are pending in this application.

In the Office Action, the Examiner requested evidence that the parent PCT application was copending with the present application; alleged that the title was not descriptive; objected to a cross-reference to a foreign application in the specification; objected to the specification for failing to provide proper antecedent basis for claim 9; and objected to claim 8 as being of improper dependent form.

Additionally, the Examiner rejected claims 8, 14, 15, 17-19, 22, and 24 under 35 U.S.C. § 112, ¶ 2, as being indefinite; rejected claims 1-5, 8-10, and 17-22 under 35 U.S.C. § 102(b), as being anticipated by U.S. Patent No. 4,871,004 to Brown et al. (“Brown”); rejected claims 1-12 and 17-24 under 35 U.S.C. § 102(b), as being anticipated by European Patent Application No. 0,592,218 (“EP ’218”); rejected claims 1-10 and 17-24 under 35 U.S.C. § 102(b), as being anticipated by U.S. Patent No. 5,576,104 to Causa et al. (“Causa I”); rejected claims 1-12 and 17-22 under 35 U.S.C. § 102(b) as being anticipated by Japanese Patent Document No. 04-274,903 (“JP ’903”); rejected claims 1, 2, 5-10, 13, and 17-22 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,759,306 to Greiner et al. (“Greiner”); rejected claims 1, 2, 4-10, 13, and 17-22 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,916,968 to Masson (“Masson”); rejected claims 1, 2, 4, 5, 8, 9, 11, 12, and 17-22 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,772,130 to Marzocchi

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
[www.finnegan.com](http://www.finnegan.com)

(“Marzocchi”); rejected claims 1, 2, 4-10, and 17-24 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,513,683 to Causa et al. (“Causa II”); rejected claim 17 under 35 U.S.C. § 103(a), as being unpatentable over Brown; rejected claims 1-12 and 17-24 under 35 U.S.C. § 103(a), as being unpatentable over EP ’218; rejected claim 17 under 35 U.S.C. § 103(a), as being unpatentable over JP ’903; and rejected claims 1, 2, 4-10, and 17-24 under 35 U.S.C. § 103(a) as being unpatentable over Causa II.

Further, the Examiner stated that claims 14 and 15 would be allowable if rewritten to overcome the rejections under 35 U.S.C. § 112, ¶ 2, and to include all of the limitations of the base claim and any intervening claims. Finally, the Examiner stated that claim 16 would be allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims.

Applicants respectfully traverse the Examiner’s rejections.

#### Allowable Claims

Applicants gratefully acknowledge the Examiner’s statements that claims 14-16 would be allowable if rewritten.

#### Chapter II

Applicants submit a copy of page 9823 of Section II of the PCT Gazette dated July 6, 2000. This page, also available at <http://pctgazette.wipo.int/pdf/272000-2.pdf>, indicates that a Demand for International Preliminary Examination was filed prior to the expiration of nineteen (19) months from the priority date in the case of International Patent Application No. PCT/EP99/08065.

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
[www.finnegan.com](http://www.finnegan.com)

Applicants submit that this provides evidence that Chapter II was requested in order to maintain pendency of the parent application thirty (30) months from the foreign-priority date.

The Title

Applicants amend the title substantially as recommended by Examiner.

Foreign Priority

Applicants delete the reference to the foreign-priority document from the specification. Applicants reemphasize, however, that Applicants still claim the right of priority under 35 U.S.C. § 119(a) - (d) based on European Patent Application No. 98120357.3, filed October 28, 1998, in the European Patent Office.

Antecedent Basis

Applicants amend the specification to recite “[t]he compound material may comprise greater than about 50% natural rubber.”

Proper Dependent Form

Between a belt structure and a tread band, a tire may include, for example, a zero-degree nylon layer, a rubber sheet, and a tread underlayer. In the present invention, the elastomeric intermediate layer may replace, for example, the zero-degree nylon layer, but not the rubber sheet or tread underlayer. Specification, p. 4/ll. 8-12. In this case, the elastomeric intermediate layer is not “incorporated into the tread band.”

Thus, a dependent claim reciting “the elastomeric intermediate layer is incorporated into the tread band” further limits an independent claim reciting “a fiber-reinforced elastomeric intermediate layer is disposed between the belt structure and the tread band.”

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
[www.finnegan.com](http://www.finnegan.com)

35 U.S.C. § 112, ¶ 2 Rejections

Applicants submit that the cancellation, without prejudice or disclaimer, of claims 1-13 and 17-24, the amendment of claims 14-16, and the addition of new claims 25-92 obviate the Examiner's rejections under 35 U.S.C. § 112, ¶ 2.

35 U.S.C. § 102(b) Rejections

Applicants submit that the cancellation, without prejudice or disclaimer, of claims 1-13 and 17-24, and the addition of new claims 25-92 obviate the Examiner's rejections under 35 U.S.C. § 102(b).

35 U.S.C. § 103(a) Rejections

Applicants submit that the cancellation, without prejudice or disclaimer, of claims 1-13 and 17-24, and the addition of new claims 25-92 obviate the Examiner's rejections under 35 U.S.C. § 103(a).

Claim Scope

In discussing the specification, claims, abstract, and drawings in this Amendment, it is to be understood that Applicants are in no way intending to limit the scope of the claims to any exemplary embodiments described in the specification or abstract and/or shown in the drawings. Rather, Applicants believe that Applicants are entitled to have the claims interpreted broadly, to the maximum extent permitted by statute, regulation, and applicable case law.

Summary

In view of the foregoing amendments and remarks, Applicants respectfully request the reconsideration and reexamination of this Application and the timely allowance of the pending claims.

Application Serial No. 09/843,227  
Filing Date: April 27, 2001  
Attorney Docket No. 7040.0083.00

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

By: \_\_\_\_\_

  
Lawrence F. Galvin  
Reg. No. 44,694

Dated: March 12, 2003

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
[www.finnegan.com](http://www.finnegan.com)

## APPENDIX TO AMENDMENT

### Amendments to the Title

Please amend the title, as follows:

TIRE, INCLUDING FIBER-REINFORCED ELASTOMERIC INTERMEDIATE LAYER BETWEEN THE BELT STRUCTURE AND TREAD BAND, AND METHOD OF MAKING [SAME] THE TIRE

### Amendments to the Specification

Please amend the specification, as follows:

Page 1, amend the first paragraph, as follows:

This application is a continuation of International Patent Application No. PCT/EP99/08065, filed October 26, 1999, in the European Patent Office; additionally, [Applicants claim the right of priority under 35 U.S.C. § 119(a) - (d) based on patent application No. 98120357.3, filed October 28, 1998, in the European Patent Office; further,] Applicants claim the benefit under 35 U.S.C. § 119(e) based on prior-filed, copending provisional application No. 60/106,627, filed November 2, 1998, in the U.S. Patent and Trademark Office; the contents of [all] both of which are relied upon and incorporated herein by reference.

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
[www.finnegan.com](http://www.finnegan.com)

Page 7, amend the section heading at line 8, as follows:

DETAILED DESCRIPTION OF THE [PREFERRED] EXEMPLARY EMBODIMENTS

Page 8, amend the paragraph at lines 20-31, as follows:

Figure 2 illustrates a partial construction of a tire T according to a second example in the prior art. As shown, tread band TB includes an underlayer UL at its lowermost portion above rubber sheet RS. Underlayer UL is usually between about 1 mm to 2 mm thick, but in any event, underlayer UL is not thick enough that it comes into contact with the road when the tire tread wears out. This is desirable because the composition of underlayer UL differs from that of tread band TB and, therefore, does not have the same operational characteristics as tread band TB. As in the first prior art example, nylon layer NL is disposed below rubber sheet RS. Underlayer UL, rubber sheet RS, and nylon layer NL have a combined thickness TH. As in the first example, mini-side walls MSW may be disposed at either lateral edge of tread band TB.

Page 14, amend the paragraph at lines 14-20, as follows:

For the present invention, a combination of NR and E-SBR is preferred. While the best results found were obtained with NR, unfortunately the use of an all-NR mixture was ruled out because of the troubles encountered when the compound was extruded. The temperature needed to extrude the NR product was simply too high. Experiments showed that a suitable compromise

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
[www.finnegan.com](http://www.finnegan.com)

was obtained with a blend of about 60% NR and about 40% E-SBR. The compound material may comprise greater than about 50% natural rubber.

**Amendments to the Claims**

Please amend claims 14-16, as follows:

14. (twice amended) [The tire of claim 13,] A pneumatic tire for a vehicle wheel, comprising:

a carcass;

a tread band;

sidewalls;

beads for anchoring the tire on a rim of the wheel; and

a belt structure between the carcass and the tread band;

wherein the tread band comprises grooves on a surface of the tread band;

wherein the tread band is disposed in a radially-outer position relative to the carcass;

wherein a fiber-reinforced elastomeric intermediate layer is disposed between the belt structure and the tread band,

wherein the elastomeric intermediate layer comprises, in cross-section, two edge portions thicker than a central portion,

wherein each edge portion comprises substantially-constant thickness,

wherein the [two] edge portions are both [between] greater than or equal to about 25% [to 75%] thicker than the central portion, and

wherein the edge portions are both less than or equal to about 75% thicker than the central portion.

15. (twice amended) The tire of claim [13] 14, wherein the [two] edge portions are both about 33% thicker than the central portion.

16. (twice amended) [The tire of claim 13,] A pneumatic tire for a vehicle wheel, comprising:

a carcass;

a tread band;

sidewalls;

beads for anchoring the tire on a rim of the wheel; and

a belt structure between the carcass and the tread band;

wherein the tread band comprises grooves on a surface of the tread band;

wherein the tread band is disposed in a radially-outer position relative to the carcass;

wherein a fiber-reinforced elastomeric intermediate layer is disposed between the belt structure and the tread band,

wherein the elastomeric intermediate layer comprises, in cross-section, two edge portions thicker than a central portion,

wherein the [fiber-reinforced] elastomeric intermediate layer [has] comprises a width,

wherein the [two] edge portions each comprise about 2/7ths of the width, and

wherein the central portion comprises a remaining about 3/7ths of the width.

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
[www.finnegan.com](http://www.finnegan.com)